

Claims

1. A snubber module of a snubber circuit for suppressing a surge voltage, comprising twelve snubber diodes and a snubber capacitor, and a resin mold in which said snubber diodes and said snubber capacitor are enclosed, wherein two capacitor external terminals, which are connected to two terminals of said snubber capacitor respectively, and six diode external terminals, each of which is connected to a connecting portion of respective two of said twelve snubber diodes, are exposed from said resin mold.

2. A snubber module according to claim 1, wherein said snubber circuit is configured by:

at least six sets of serial diodes each of which is configured by two snubber diodes, an anode terminal of one of said snubber diodes being connected to a cathode terminal of another one of said snubber diodes, and said connecting portion is a connecting portion of said anode and said cathode terminals; and

a snubber capacitor in which one terminal is connected commonly to anode terminals of said serial diodes on a side that is not connected to said six diode external terminals, and another terminal is connected commonly to cathode terminals of said serial diodes on a side that is not connected to said six diode external terminals.

3. A snubber module according to claim 1 or 2, wherein said six diode external terminals are configured to have same intervals as input and output terminals of a semiconductor switch module which can bidirectionally supply a power between three terminals.

4. A power conversion apparatus wherein said apparatus is configured by: a semiconductor switch module which is

configured by eighteen semiconductor switching devices having a self arc-extinguishing ability and a reverse withstand characteristic, and in which two of said eighteen semiconductor switching devices are connected in antiparallel to each other to constitute one bidirectional switch, thereby constituting nine bidirectional switches, and three bidirectional switch groups each configured by three bidirectional switches are connected to three input terminals and one output terminal, respectively; and

a snubber module according to any one of claims 1 to 3 in which said six diode terminal terminals are connected to said input and output terminals of said semiconductor switch module, respectively.